

ICE BREAKER

TASMANIA'S ANTARCTIC NEWS AND VIEW

IMAS Future

Structure and courses available

Antarctic Movers

Recent staff changeovers

Ice Focus

Forthcoming Polar events



**PURDON &
FEATHERSTONE**

(EST. 1853)

Waterfront & Shipping Suppliers for over 150 years

Ship Chandlers, Provedores and Contract Provision Suppliers to the

Antarctic Sector

provisions

bonded stores

cabin stores

chemicals and oils

safety equipment

deck and engine stores

general ship supplies



Phone: 61 3 6224 2810 Fax: 61 3 6224 5900 email: pandf@fader.com.au

HOBART 0700

WILKINS 1130

...that's plane sailing



SKYTRADERS

Prescriptive Aviation Solutions

www.skytraders.com.au

Willard Estate Logistics



International Shipping

Willard Estate Logistics provide logistical support for some of Tasmania's most iconic international traders. From exporting containers of commodities to importing machinery, Willard Estate Logistics have been able to provide sound advice as well as co ordinate the international shipping and documentation to make the process as simple as possible for all concerned. With over 30 years combined industry experience between the owners of Willard Estate Logistics and a commitment to the success of Tasmanian exports, Willard Estate Logistics stand by to assist with your international export or import.

- Full container shipping
- Customs clearance
- Specialized handling
- Export documentation
- Less than a container shipping
- AQIS documentation
- Transport co ordination
- Door to door shipping

Willard Estate Logistics - Proudly Taking Tasmania to the World.
22 Cameron Street
Launceston, Tasmania. 7250

Phone: 03 63348633
Facsimile: 03 63310263
Email: logistics@willardestate.com
Web Page: www.willardestate.com

ASTROLABE BOOKSELLERS



Fine, Old & Rare Books

Specialising in Tasmaniana
& Antarctica

First floor, 81 Salamanca Place, Hobart
Phone /Fax: (03) 6223 8644
e-mail: books@astrolabebooks.com.au
www.astrolabebooks.com.au

P&O Maritime Services

Specialist Shipping Services

P&O Maritime Services
*is recognised as a
premier provider of
specialist shipping and
related logistic services
to defence, marine
science and
research,
mining and
government
sectors*



GPO Box 88, Melbourne Vic 3001 Australia
Telephone +61 3 9254 1600 Facsimile +61 3 9254 1658
www.pomaritime.com manager@pomaritime.com



This edition includes more information about the new Institute of Marine and Antarctic Studies, as well as introducing new members of the Antarctic community.

IB specially thanks the private sponsor who has renewed magazine subscriptions to all Tasmanian high schools and colleges, despite the current economic downturn, although this has sadly meant fewer advertisers and subscribers to the magazine.

On a personal note, I am pleased to announce that new orders for Igloo Satellite Cabins have resulted in one going to UK, one to NZ and others, potentially, to Korea and Chile. It seems that finance for goods and services for Antarctica and the Southern Ocean research is still available in Australia and internationally, with several other Tasmanian companies also benefitting from this need. Let's hope it continues!

Anthea Wallhead

Editor, Ice Breaker Magazine

Contents

Regulars

| | |
|----------------------|----|
| ■ Jim Playsted | 6 |
| ■ Cassy O'Connor | 7 |
| ■ Anthea Pritchard | 8 |
| ■ Bill Lawson | 9 |
| ■ Tony Press | 10 |
| ■ Polar News | 14 |
| ■ Polar Publications | 18 |

Features

| | |
|--------------------------|----|
| ■ Denzil Miller | 11 |
| ■ IMAS | 12 |
| ■ End of an era | 15 |
| ■ CONASTA | 17 |
| ■ Convergency in transit | 19 |
| ■ Polar Calendar | 20 |
| ■ Shipping & Air | 22 |



Photo: Frederique Olivier

Advertising

| | |
|---------------------------|---------------|
| Full Page | 210 W x 298 H |
| \$300, \$240 (b&w) | |
| Half Page | 210 W x 149 H |
| \$220, \$176 (b&w) | |
| Third Page | 210 W x 100 H |
| \$130, \$105 (b&w) | |
| Quarter Page | 90 W x 140 H |
| \$90, \$75 (b&w) | |
| Double Column | 130 W x 140 H |
| \$90, \$75 (b&w) | |
| Single Column | 60 W x 140 H |
| \$80, \$65 (b&w) | |
| Spot Advertisement | 60 W x 70 H |
| \$50, \$40 (b&w) | |

All quoted rates are for a single edition only and include GST. Discounts available for bulk bookings.

Subscriptions

| | |
|----------------|---------|
| Australia wide | \$30.00 |
| International | \$40.00 |

(All prices AUD and inclusive of GST where applicable)

Unless specifically stated otherwise, the views expressed in this magazine are not necessarily those of any group, organisation, or institution. ICE BREAKER is published in good faith and all contributors should ensure the truth of any facts stated.

ICE BREAKER Magazine Copyright 2008 Icewall One and individual contributors.

Cover: Antarctic Shore by Frederique Olivier

Back Page: Antarctic Midwinder postcards courtesy Klaus Arne Pedersen.

ICE BREAKER magazine is published independently by Icewall One as a quarterly magazine covering Tasmanian Polar and Southern Ocean related topics.

Editor and Production
Co-ordinator: Anthea Wallhead
Visual editor: Robert Wallhead
Research: Peter Wallhead

Comments and contributions for future editions are most welcome. Please address them to:

Editor, ICE BREAKER
240 Watsons Rd, Kettering
Australia, Tasmania, 7155
Phone: 03 6267 4774
Facsimile: 03 6267 4335
anthea@icewall.com.au
www.icewall.com.au/icebreakermagazine



Jim Playsted

How much more momentum
should we now have...

Recently, I attended a day long seminar at UTas titled 'Climate Change & Rural Tasmania: What evidence for which policies and practices?'

Since my introduction to climate science courtesy of the TPN and ACE CRC in the mid 1990's, I have kept a keen interest in this arena. From a fringe issue then it sure is mainstream now, but I remain a pragmatic business thinker and as I sat through the UTas day listening to all manner of passionate appeals for action – my take on the day is as follows.

Academia seemed to be saying 'plan on worst case and hope for something better'. No doubt about it – climate change is happening and always has. So while the scientists argue over the science and the politicians argue over the policy – my view is the rest of us and our industries need to get on with what we always have: Adapting to our changing circumstances, while letting others worry themselves with programmatic climacticity (to misquote our Prime Minister).

There were in fact some very good points made in the UTas forum. Unarguable stuff like the evidence of warmer water heading for the NE coast of Tasmania over the next 20 years, backed by a compelling body of marine research and data to say it is so.

There is therefore opportunity for the application of that science in the adaptation of the fishing industry and the expansion of our game fishing tourism sector. That's just one example of using climate science to trend, anticipate and plan our future opportunities, as well as the threats. And there is plenty of other upside for agriculture too in our part of the world, if we do become warmer over time.

It's been a while since the initial focus of activity which characterised the launch of the TPN, which I first chaired back in 1995 I think it was. Back then our Federal Government was at odds with the French over nuclear testing and there was a real prospect of losing their presence from Hobart in favour of either Fremantle and/or their own Kerguelen Islands French territory. The cruise ships' dream for Hobart Port was in its infancy as was planning for an air link with Antarctica, since the world's best scientists were no longer willing to sit on a ship for 8 days each way, to do their valuable work.

But through friendships formed amongst all the sectors which slowly came in under the TPN umbrella, and excellent cooperation from both state and federal governments, we were able to play our part and facilitate the story of a vision for the centre of excellence Tasmania was to become, in respect of Antarctica and the Southern Ocean. And to defend ourselves with economic data and outcomes as well as the vision for what education, research and resupply could bring to our tiny but special island in the great Southern Ocean.

How much more momentum should we now have, given the agenda of governments all over the world, calling for scientific monitoring of climate change and what to do about reducing carbon in the atmosphere? What new initiatives might Tasmania and Hobart in particular take to ensure we keep our place at the leading edge, driving commercial enterprise in turn for our business community?

So I'm looking forward to reconnecting with some old friends and making new ones on this continuing journey of Southern Ocean and Antarctic science discovery. And I already know of opportunities to leverage our position

and the port of Hobart in particular, due to the climate change debate. We too need to adapt and change – as well as lead.

But like personal success – it's not so much about our circumstances as it is the choices we make. I believe TPN has an important and on-going role as a facilitatory chamber of friends presenting a united front of Tasmanian capability where our motto may well be: 'The answer is yes, what's the question?' – wherever we may be in the world.

Jim Playsted

Will Hodgman, Leader of the Opposition, invited Jim Playsted, Liberal Lyons candidate to express his views on current Antarctic matters.

ice.edu

Adelie Penguin

Height: 70 cm
Flipper length: 20-24 cm
Weight: about 5 kg.
Lifespan: at least 15-20 years

Birds return to land and trek to their breeding grounds inland. Females lay 2 eggs in November, then go back to sea to feed in fresh feeding grounds opened up by melting ice. Males stay on the eggs while the female is away.





Cassy O'Connor

...sea temperature rises around Australia will be greatest in the South East Demersal Fisheries...

In recent weeks the Federal Parliament has approved the first part of Australia's national response to climate change – the Mandatory Renewable Energy Target legislation which will require 20 percent of Australia's energy to come from renewable sources by 2020.

The Greens believe the 20 percent target is too low, and that Labor and Liberal have been reduced to playing politics over this most serious of issues, but that's another story!

The ramifications of runaway climate change are driving our efforts to mitigate carbon emissions by moving to low and zero-emissions technology, but what are these ramifications for Tasmania?

One of the most serious consequences of climate change in Tasmania is the steadily rising sea temperature, which has knock-on effects for the range and habitat of all commercial fisheries in Tasmanian waters. Government studies already predict that sea temperature rises around Australia will be greatest in the South East Demersal Fisheries which surround Tasmania, so these sea-warming effects (which are a direct result of climate change) will affect Tasmania far more than any other Australian state.

"In the last decade, around 36 species of marine fish have shown noticeable changes in distribution, including range shifts further south and new species not previously recorded in Tasmania."^[1]

The steady rise in sea temperatures will have a critical impact on commercial fisheries around Tasmania. In fact, there have already been conspicuous changes in the distribution of Tasma-

nian marine life, and we are already seeing a number of destructive marine predators extending their range southwards as water temperatures rise.

Unfortunately, unlike these southward-migrating predators, most commercial Tasmanian fisheries are at the southern end of their range, leaving little room for commercial species to migrate southwards in order to escape the warming waters.

Tasmania's Atlantic Salmon-based aquaculture industry is also extremely vulnerable to rising water temperatures due to the species' need for cold water. Currently, the water temperatures around Tasmania are at the upper limit of tolerance for farmed Atlantic Salmon, and any further rise in sea temperatures may well decimate this industry as fish stocks struggle in excessively warm water.

The worst of the new, climate change-driven, predators in Tasmanian waters (so far) is the long-spined sea urchin from NSW (*Centrostephanus rodgersii*) which, prior to 1978, had never been seen along Tasmania's east coast. *C. rodgersii* is now colonising the marine habitat of the east coast and it is predicted that the urchin will eventually colonise 50 percent of the rocky reef habitat in that region, with serious implications for the sustainability of Tasmania's east coast crayfish and abalone fisheries.

The climate change-driven changes facing Tasmanian marine areas will have dire ramifications for Tasmanian fisheries and fishers, yet our national efforts at climate change mitigation are currently falling well short of what the science tells us is required.

References:

[1] "Fact Sheet: Climate Change – Potential Costs and Impacts – Tasmania," Department of Climate Change, Australia, <http://www.climatechange.gov.au/impacts/publications/pubs/fs-tas.pdf> (No author listed).

Hobday, A. J., E. S. Poloczanska, and R. J. Matear (eds) (2008). "Implications of Climate Change for Australian Fisheries and Aquaculture: a preliminary assessment," Report to the Department of Climate Change, Canberra, Australia. August 2008.

Cassy O'Connor

Tasmanian Greens Spokesperson on Antarctic Affairs

ice.edu

South Polar Skua

Length: 530 mm

Wingspan: up to 1.3m

Weight: 0.9-1.5 kg

Lifespan: about 20 years

Birds fly south to Antarctica and are sighted off the N. American coast in October. Egg-laying starts in November. Females lay 2 eggs in a scrape in the ground, the first 2-3 days before the second, and then incubate them.





Anthea Prichard

...our team has been bolstered to
seven people...

I have been fortunate to recently be appointed to the position of Director, Antarctic Tasmania, Science and Research as a result of a comprehensive restructure of our Department prompted by the strategic vision of our newly appointed Secretary, Mark Kelleher.

Ben Galbraith, who has led Antarctic Tasmania so capably and passionately over the last six years, is staying with the department but taking on a new challenge as the Director, Research, within the Strategy, Policy & Research division. We are fortunate that Ben is remaining within the department, so that we are able to utilise his significant knowledge and experience within the area. I expect you will all still see Ben from time to time at particular events.

A further aspect of change within this re-structure is that our new unit is not only responsible for fulfilling the charter of Antarctic Tasmania, but also for developing the Science and Research sector and capability within Tasmanian organisations. Consequently our team has been bolstered to seven people to strengthen these sectors. I look forward to introducing you to the full team when next you visit Antarctic Tasmania's office, but for now I would like to introduce the key people working on the Antarctic Sector business.

Firstly, a little bit of background about myself. I joined the Department of Economic Development, Tourism & the Arts in August last year to take on the role of Director of the Tasmania Brand Project. Prior to that, I was the National Marketing Manager at J. Boag & Son for seven years, responsible for strategy and brand development. I have also held senior Marketing and Sales positions with Diageo in Victoria. I am a current Board member of the Food Industry Council and a Board

member of the Tasmanian Leaders Program.

Working with me in the Antarctic sector is Chrissie Trousselot who has been appointed as the Manager of Antarctic Tasmania. Chrissie was previously a Manager within the Innovation, Science and Technology unit of the department, managing the Tasmanian Innovation Advisory Board programs, the Intelligent Island program and several skills development programs for entrepreneurs. Chrissie has fifteen years of experience across diverse areas of government and brings strong project and stakeholder management skills to the position.

You will be pleased to know that Mary Woolnough is continuing with the unit, providing invaluable support to not only our unit, but also the Tasmanian Polar Network and ACAP.

The key priorities for Antarctic Tasmania in the coming months are:

- To ensure the critical requirements necessary for an efficient functional port for the Antarctic sector, businesses and marine science organisations are fully represented and understood by government.
- To work with all existing and potential stakeholders in the sector to maximise the Antarctic and Southern Ocean sector's contribution to the Tasmanian economy, community and brand.
- To develop the Antarctic science, research and education sector through working closely the University and Institutes in the sector.
- To work towards securing large and strategically important conferences and forums for Hobart in the Antarctic, Sub-Antarctic and Marine science space.
- To maximise the education and tourism potential of Antarctica for Tas-

mania through leveraging opportunities such as the centenary of Mawson's Antarctic expedition.

I expect many Ice Breaker readers will support us on this exciting journey and your expertise, passion and commitment to the Antarctic and Tasmania are incredibly valuable and necessary for our success in strengthening the important contribution the Antarctic makes to Tasmania's economy, brand and community identity.

Thank you to all those stakeholders who Chrissie and I have met with to date. We very much appreciate the time you have taken to educate us on the sector and we look forward to working with you in the future.

Anthea Prichard

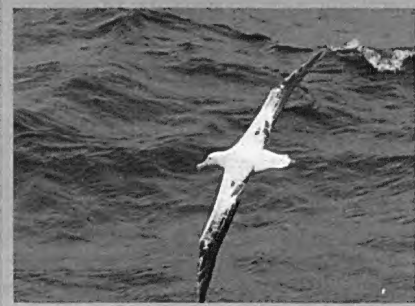
Director Antarctic Tasmania, Science and Research

ice.edu

Wandering Albatross

Length: up to 1.4m
Wingspan: up to 3.4m
Weight: up to 12 kg
Lifespan: at least 40 years

In October, after a year of flying around, birds return to their breeding grounds, such as Bird Island in S. Georgia. Pairs use the same nest of mud and vegetation, often in boggy moorland and begin an elaborate courtship prior to mating.





Bill Lawson

...there is clearly a strong team
remaining with the TPN...

This is my last message as Chairman of the TPN as I intend to step down at the upcoming AGM on 9th October this year. I do so with a mixed sense of pride and regret, but cognisance that the sustainability of the TPN and its important activities require that another person takes my place.

This is also a good time to stand aside as we are in something of a time of change in TPN's operating sphere, with a new Executive Team at AAD as well as recent changes in DED and AT and the advent of the new IMAS. Importantly too there is clearly a strong team remaining with the TPN from which my successor can be confidently chosen.

From my viewpoint, it is also timely to move on as my 'real job' with SKM has just changed to a global role in the oversight of the Company's CSR work in the communities in which we trade across the globe. This change, for which I am immensely grateful and challenged, demands my focused attention for the remaining few years of my working life. In particular, I am strongly personally challenged to make a positive and sustained contribution to helping to overcome the terrible disadvantage under which Indigenous Australians now live. 'Closing the Gap' between Indigenous and non-Indigenous Australians demands my attention and service.

Just a few reflections seem appropriate as I write this, my final Chairman's Message for Ice Breaker.

Firstly, some of the people with whom I have been privileged to work in this role:

- The Directors of the Office of Antarctic Affairs/Antarctic Tasmania – Tony Hughson, Bill Bleathman, Greg Johannes and Ben Galbraith; all very different blokes but all very capable. I have

enjoyed working with them all.

- TPN Members and particularly Executive Committee Members – too many to name but a tremendous bunch of people from enormously diverse backgrounds and interests fused together with a common interest in the Antarctic, Sub-Antarctic and Southern Ocean. I have often pondered the division yet unity between our scientific and non-scientific membership bases as we have all striven together for Tasmania's best interests.

- The TPN's relationships with its scientifically based organisations based in Hobart (AAD, CCAMLR, IASOS, Ace CRC, to name a few) has been wonderfully open and cooperative. I firmly believe that these relationships have been the underlying reason for the successes we have achieved together for our State's benefit. When you think about it, good and trusting relationships underpin everything good we achieve in life. Interestingly, this is for me perhaps one of the most important clues for me in facing up to Australia's Reconciliation challenges, as we do not have good relationships in a lot of places and roles.

- The Tasmanian Government over many years has supported and assisted the TPN in its work – despite our differences lately. This support has allowed succeeding Governors to also be involved due to continued bipartisan support. I want to particularly note the role of Sir Guy Green, when in his term as Tasmania's Governor; he hosted four Forums focused on opportunities south of Tasmania. I have no doubt that these allowed a common focus which spawned many of today's achievements, most particularly including the Hobart-Antarctic Airlink.

Secondly, some of the TPN's achieve-

ments over the past decade or so:

- There can be no doubt that the TPN played a key role in winning the Antarctic Airlink through a close, collaborative relationship with AAD.

- Not only did we have to convince the Federal Government of the merits of the Airlink but we had to fight off Albany in WA when they figured it ought to be based there.

- We have played a part in increasing the awareness of Tasmania's citizens to the relevance and opportunity offered by 'looking south, as well as north'. The annual Midwinter Festival is a good example of this focus.

- We have made a meaningful contribution to raising educational focus on Antarctica, the Sub-Antarctic and the Southern Ocean, initially at the tertiary level and now at the secondary and even primary level.

- We have just played a key role in protecting the future of the Port of Hobart. This remains one of the biggest threats to the TPN's work ahead and will no doubt hold the Network's attentions for some time yet.

In closing then, I want to say thank you to TPN Members for entrusting me the leadership the organisation over the past decade or so. It has been my privilege and pleasure to do so.

Good luck for the future – I'll be a very interested spectator!

Bill Lawson
Chairman, TPN

For comment on Bill's TPN role, see End of and Era on P.15 [Ed]



Tony Press

The importance of this funding should not be underestimated.

I am pleased to be able to report that the ACE CRC has been funded for a further 5 years in a successful outcome for its application in Round 11 of the CRC Program. The interview team travelled to Canberra for its interview on 1 July and the Minister for Innovation, Industry Science and Research, Senator Kim Carr, made the announcement on 7 August, 2009.

This new funding will enable the ACE CRC to continue its significant climate change research in the Southern Ocean and Antarctica and help fill the gaps in the world's understanding of climate change and its impacts regionally and globally.

The importance of this funding should not be underestimated. The research the ACE CRC does is crucial to understanding the extent and rate of climate change, and vital in underpinning sensible responses by governments, not only in Australia but around the world. In June 2008, at a speech at Kyoto University, the Prime Minister of Australia, the Hon Kevin Rudd, said: "Climate change is the greatest moral, economic and social challenge of our time...we take the view that our policy approaches must be informed by a clear understanding of the science of climate change."

If I may quote from our application: "Climate change will impact all of Australian society. Decisions made – or not made – will have a profound effect on the economy, environment and community. The Australian Government has responded with a strategy based on "three pillars": mitigation; adaptation; and helping to shape a global solution. The success of the strategy will depend on the best scientific information being available to inform policy decisions and guide practical actions. Timely and appropriate action is critical: over

responding will waste resources; under responding inevitably will be costly.

"Extension of the ACE CRC will enable the investigation of critical scientific uncertainties, highlighted by the Intergovernmental Panel on Climate Change (IPCC), that limit Australia's and the global community's ability to respond effectively to the challenges of climate change. Recent discoveries underscore the urgency: the vast Southern Ocean is warming more rapidly than the rest of the global ocean; sea level is rising faster than predicted; the Antarctic and Greenland ice sheets are more dynamic than previously believed, increasing the risk of an abrupt increase in sea level; and increasing carbon dioxide (CO₂) concentrations are acidifying the Southern Ocean with potentially destructive impacts on marine ecosystems. Since Antarctic and Southern Ocean processes influence regional and global climate in profound ways and the Southern Ocean is likely to experience most of the changes sooner than warmer oceans, knowledge of the nature and impact of the changes is essential in planning for the future. Effective mitigation and adaptation to climate change requires an ability to anticipate future change with a level of detail and confidence that can only be achieved through an improved understanding of the climate system.

"In the 5-year extension, the ACE CRC will focus on four key challenges:

1. How is the Southern Ocean changing and what are the implications for Australian and global climate now and in the future?
2. How will sea ice and the Antarctic ice sheet respond to changes in climate and what impact will changes in the cryosphere have on climate and sea level?

3. Will the Southern Ocean continue to remove CO₂ from the atmosphere and how rapidly will this increase the acidity of the ocean?

4. What will be the impact of Southern Ocean and sea ice changes on Antarctic ecosystems and fisheries?"

The renewed ACE CRC will bring new partners into the collaboration and I hope to be able to introduce these partners to ICE BREAKER readers in future editions.

I would like to thank all our ACE CRC supporters, collaborators and researchers for their efforts and support in the successful bid; and give a special thanks to the bid and interview teams who did a great job!

Tony Press

CEO ACE CRC

ice.edu

Southern Giant Petrel

Length: 1m
Wingspan: up to 1.8m
Weight: up to 4.8 kg
Lifespan: 20 years

Adults reach breeding colonies in October and November and usually find last year's partner and nest site. After mating, pairs feast at sea, then females each lay one large egg in November or December.



Recent CCAMLR developments

Denzil Miller's final report

Since the Convention on the Conservation of Antarctic Marine Living Resources entered into force in 1982, the attached 25-nation Commission (CCAMLR) has used objective scientific advice to address the Convention's various objectives. Over the years, a clearer appreciation of how the various components of the Southern Ocean ecosystem(s) fit together has evolved along with operationally-based procedures to make things happen in terms of managing fishing and associated activities in the Convention Area. To achieve this, CCAMLR has developed a systematic approach to its daily business. This involves elaborating key management measures, such as

protected areas and fishery controls, to take of account of the need to conserve key ecosystem structure and function. A rigorously-defined management process has evolved to provide objective assessments of harvested stock status, to analytically define management options aimed at reducing the potential ecological risks of fishing and to provide for informed participation in CCAMLR management activities.

CCAMLR's successes have been built on free and open participation; a legacy of the consensus-based decision-making inherited from the Antarctic Treaty. Its achievements are impressive and, while largely speaking for themselves, include:

- First elaboration of an ecosystem approach to fisheries management
- Promulgation of the first precautionary catch limits by any regional management organization
- Effective seabird mortality mitigation in longline fisheries
- The identification of candidate marine protected areas based on a scientific determination of key biological regions
- Procedures to identify and manage fishing on the sea bottom to account for vulnerable marine ecosystems; and
- Phased fishery development.

Such initiatives have greatly enhanced CCAMLR's standing as the global leader to follow in the best practice management of marine living resources.

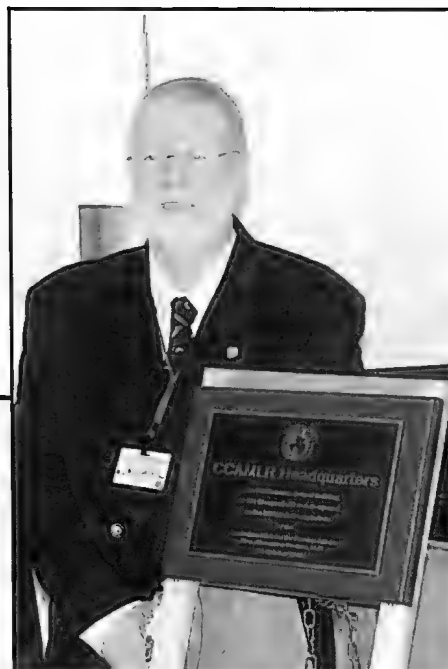
Dr Denzil Miller

CCAMLR Executive Secretary

A new Executive Secretary will be appointed by the end of 2009 [Ed]

A childhood dream comes true

Karen Westwood and the Trajer Ridge Igloo, Antarctica. Photo: Karen Westwood.



IMAS

Institute for Marine and Antarctic Studies

At the last TPN meeting, Professor Johanna Laybourn-Parry provided further details about the development of Hobart's newest Institute

Drivers for establishing IMAS

- Recent Australian Institute of Marine Science (IMS) index – marine science industries are valued at \$38 billion and have grown 42% since 2000. Wild fish capture equals \$1,439 million and aquaculture \$666 million. Tasmanian Aquaculture and Fisheries Institute (TAFI) conducts important research in both areas and has recently won a \$10 million contract.
- Other universities have drawn their marine science into entities that give critical mass and increased profile.
- UTAS has established with University of WA and James Cook University a National Marine Science Network. We have won a \$3.4 million grant from DASA to develop this network in research and training.
- We are moving into the Excellence in Research for Australia (ERA) research performance culture and we must develop a stronger national and international profile in research areas that are currently fractionated.
- We risk reputational damage if we do not establish IMAS.
- We will have difficulty attracting and retaining strong staff if IMAS is not established. Staff are already being poached.

- We will lose credibility with important collaborating institutes and stakeholders

We have won \$45 million from the Education Investment Fund to construct an IMAS building on the Hobart Waterfront.

Mission statement

- A high responsiveness to the needs of stakeholders
- Contributing to the sustainable development, utilisation and management of marine resources
- Contributing to policy development and policy application
- Will continue to build extensive local, national and international collaboration and networks
- Will provide excellent post-graduate training
- Will enhance the reputation of UTAS – high quality outputs
- Will engage in knowledge transfer and enterprise

IMAS Benefits for Tasmania

- Will enhance the reputation of marine and Antarctic science (including aquaculture and fisher-

ies) both nationally and internationally, attracting more funding.

- Attract and retain high quality staff
- Strengthen the collaboration between CSIRO, AAD and UTAS, which is important for retaining these federally funded agencies in the State.
- Provide an additional tourist and education facility

IMAS Board

- Chair appointed by Council in consultation with the State Govt.
- Vice-Chancellor or nominee
- The Secretary of Department of Primary Industries and Water
- A member nominated by Council
- Two representatives from stakeholder industries
- An eminent scientist
- The Executive Director ex-officio

IMAS Staff

- Staff and research students





L-R CSIRO, Princes Wharf No.2 Shed, Aurora Australis and Princes Wharf No.1 Shed

currently in TAFI, Centre for Marine Conservation and Resource Sustainability, Institute of Antarctic and Southern Ocean Studies (IASOS) and Antarctic Climate and Ecosystems Cooperative research Centre (ACE CRC)

- Two staff from Zoology and one from Plant Science together with their research groups

- Associate members (voluntary membership) from staff who have some research interest in marine and Antarctic research and relevant staff form the Australian Maritime College

Research, Teaching and PhD Training

- IMAS will be well placed to enhance the profile of marine and Antarctic science in UTAS, with ongoing grant income and research publications

- IMAS staff will continue to teach on undergraduate degrees owned by Science, Engineering and Technology (SET) and other Faculties

- IMAS will develop masters degrees that it will own

- DASA funding will support some new initiatives

- IMAS will start with a population of 150 PhD students

- It will own the very successful Quality Management Services

(QMS) program

- It will provide an excellent environment for training research students that will involve the AAD, CSIRO and stakeholders

- The recently launched Australian Integrated Marine Observing System (IMOS) will be based at IMAS

Implementation

- Co-location in the medical sciences Building on the Sandy bay campus in early 2010

- Future IMAS building located on the waterfront

- Appointment of Director, to be announced late 2009

- Interim Reporting

- Budget to come into effect early 2010

- Renegotiation of Joint Venture Agreement

Information provided by Professor Jo Laybourn-Parry, IMAS, pro-vice-chancellor (research)

New Building

Expressions of interest are being sought from suitably qualified firms to prepare a feasibility study for a purpose-built facility for the new IMAS at Princes 2 Wharf.

Options to be

included:

- Consider adaptive re-use options

- Ensure continued ship access to the wharf apron

- Align with any redevelopment of Princes No.1 to improve public access to the waterfront

- Enhance the public amenity for major waterfront events

- Complement and enhance surrounding developments and business establishments

For further information contact Professor Daryl Le Grew Vice-Chancellor@utas.edu.au, phone (03) 6226 2003. Fax: (03) 6226 2001

Princes Wharf No.1

The State Government has chosen a design team for the redevelopment of Princes 1. Lead by award-winning architect Robert Morris-Nunn of Morris Nunn + Associates, the team recently released a report based on previous community consultations. The draft design is currently on display at Princes Wharf No. 1 Shed until September 25, 2009. The construction project is expected to begin in early 2010, a similar time to the new IMAS.

The report is available at <http://www2.treasury.tas.gov.au/princeswharf/>

Photos: Sue Halliwell

Post at sea

Australia Post managed to temporarily lose a parcel sent by registered post to an exhibition in Melbourne recently. Karin Beaumont, TPN member, zoologist and maker of jewellery inspired by Antarctic plankton, was concerned when the jewellery had not arrived on time. Australia Post eventually found the package and delivered it, too late for any sales.

Low ice

The extent of sea ice between Greenland and Norway's Svalbard Islands in the Arctic is currently the lowest in at least 800 years. Danish researchers ascertained this by examining tree ring and ice core samples as well as ship logs and harbour records since 1200.

More whales

Australian representatives at the recent International Whaling Commission meeting have once again failed to stop Japan from killing whales for 'scientific' purposes and now chefs around Tokyo are developing new recipes to encourage younger people to eat whale meat. Whale bacon, whale cutlets and whale spring rolls are available.

Medal winner

Congratulations to David Pullinger, helicopter pilot for Helicopter Resources Pty Ltd in Hobart. He has been awarded an Australian Antarctic Medal for his contributions to the planning and efficient executions of 16 scientific operations in Antarctica, particularly in the Prince Charles Mountains.

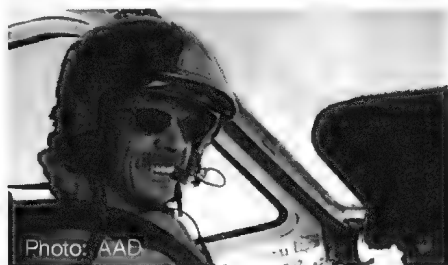


Photo: AAD

Antarctic Midwinter Festival

Events at this year's Festival in June were well attended, with over 4000 people attending displays at the Tasmanian Museum and Art Gallery on the opening night on June 19. Over 1000 people followed the Children's Lantern Parade to TMAG prior to this event.



Schools' Program volunteer guides

A renewed Antarctic Schools' Program was fully booked throughout the week, with groups visiting four centres throughout the day - CSIRO, TMAG for the Islands to Ice display and Bond Store for the Extreme Photo exhibition, and National Archives for a 'Huskies in Antarctica' film and lecture.



The Longest Night Film Festival had two new feature-length documentaries this year and the Extreme Environment Photographic Exhibition was very popular. The winner of the \$5000 Trafalgar Prize and People's Choice Award was Graham Morgan from NSW with his photo Whalers Bay (above). The \$2000 Pure Tasmania/Wayne Papps prize (top-right) was won by Ulrich Maenni's Eisscholle (Icefloe).

Photos: Sue Halliwell.



Tourism research

The Sustainable Cooperative Research Centre (STCRC) has recently published research in the field of Antarctic and Sub-Antarctic Tourism and the protection of the region's wildlife. In order to further develop acceptable tourism opportunities, the role of wildlife tourism and its impact on selected Antarctic wildlife was assessed. These research results, based on 8 individual research reports, will be used to develop operational guidelines for future wildlife viewing. Antarctic and Sub-Antarctic Tourism - Towards a Sustainable Industry, by STCRC and Lorne Kriwoken, Nick Holmes, John Williamson, Melissa Giese, Helen Achurch, S. Robinson, Claire Ellis and Murray Johnson, is available at www.crctourism.com.au.

TPN elections

In next month's Tasmanian Polar Network Annual General Meeting, voting for a new Chairman and committee members will take place. Bill Lawson, current Chairman, will be resigning and both Vice-presidents John Brennan, of Veolia Environmental Services and Geraldine Edwards, from Moonraker Pty Ltd, are interested in the position. Both candidates have a wealth of experience in Antarctic business matters, for the TPN and their own companies, and have made positive and practical contributions to the TPN since joining. Nominations from TPN members for all Committee positions are welcome.

End of an era

Geraldine Edwards reflects on Bill Lawson's TPN chairmanship

There would not be many current TPN members who were members of the young Tasmanian Polar Network back in 1994 when Bill Lawson joined, as representative of Sinclair Knight Mertz, then LPH (Tas) Pty Ltd. I know of four: Anthea Wallhead, Lorne Kriwoken, Steve Parodi and Peter Fewkes. I joined in 1997.

The office of Antarctic Affairs (OAA) was at 23-25 Old Wharf, then moved to 25 Hunter Street in 1996. There was plenty of enthusiasm, as there still is today. The former Governor of Tasmania, Sir Guy Green, who still participates in TPN affairs, held the first of his forums on Tasmania, Antarctica and the Sub-Antarctic in September 1996. Bill together with Lorne, Peter and Tony Hughson, was part of the first TPN delegation to the Scar/Scalop meetings in Cambridge UK in July 1997.

By August 1997 network business had developed to the extent that a Chairperson was deemed necessary as a formal spokesperson and Jim Playsted was duly elected. The first issue of Ice Breaker was in December 1997, closely followed by the opening of Antarctic Adventure in January 1998 and the move of OAA to its present home in Salamanca Square in June 1998. The network then decided to investigate the possibility of becoming incorporated.

By August 1998 pressure of business made it too difficult for Jim Playsted to continue as Chairman. At the November meeting, at the same time as I joined the Committee, Bill became Chairman. By January 1999 incorporation was complete and Bill became the inaugural Chairman of TPN Inc.

Bill has initiated and been actively involved in many projects, and has provided the cohesive leadership that has enabled the group to grow, with the result that the Antarctic sector now plays a significant role in the Tasmanian economy, with TPN at its focal hub as peak industry body. The economic

value of Antarctic business at the end of 1994 was just \$82.5 million. This had grown by 79% to \$147.7 million in the 2006/2007 financial year.

Some projects that have been undertaken include the following.

TPN affairs have always been carried out according to strict business principles with all activities related directly to network objectives. Immediately following incorporation, we held our first strategy workshop. This was so successful that it took us to 2007 to tick off all the goals and devise new strategies for the future. I think those who participated would agree it was lots of fun as well as being productive. You may remember Bill's vision of towing an iceberg to display in Salamanca Place so we could have Antarctic ice cubes in our gin and scotch! Later, an ice skating rink in Salamanca Place for the Midwinter Festival...

Over the years we have fought hard to bring the air link to Hobart, with Bill at the helm trying to make it happen and negate threats from our dreaded rival Albany, WA. Bill initiated several rush trips to Canberra to save the day. The first official VIP flight in November 2007 ushered in a new era for us and Bill has continued to encourage us all to make the most of it for Tasmania.

Through his leadership we have taken Antarctic endeavours to the masses and developed awareness and support from the community and government. The introduction of a Midwinter Festival, first put forward at the Governor's forums, has not only been very successful in this regard but provided a tourism attraction at what has traditionally been a slow time of year for operators.

Any growth sector needs to provide for the future and so we have encouraged and supported Antarctic education in post-graduate, graduate studies and now primary and secondary schools to ensure that today's youth will be



inspired to become involved. UTAS now offers a Bachelor of Antarctic Science degree, Graduate Diploma of Science (Antarctic and Southern Ocean Studies) and Master of Antarctic Science in polar marine biology, and has set up the International Antarctic Institute (IAI), a global consortium of universities and agencies that provide university-level education and conduct research. And soon we will have IMAS, at Princes Wharf No. 2.

More recently we have been fighting to save the Port of Hobart to ensure that there is a future in Hobart for the Antarctic sector – a home for AAD, the French and hopefully for other nations. I know personally that this impinged greatly on Bill's time and the time of all the executive.

During Bill's stewardship we have had four Directors of Antarctic Tasmania: Tony Hughson, Greg Johannes, Bill Bleathman and Ben Galbraith – and we now have in Anthea Pritchard and Christine Trousselot. Last year we saw Dr Tony Press stand down from Directorship of AAD, a position he came into at the same time as Bill became Chairman. To many of us it will represent the end of an era. So, I guess it's about time we let Bill have a change and a rest – if that is possible.

On behalf of us all Bill, I would like to thank you for all your hard work, often behind the scenes, and express the hope that you will continue to be involved as a member and give us the benefit of your valuable experience from time to time.

Geraldine Edwards

Vice President TPN

Polar News

On the move

After a change in ownership, TPN member Marcom Watson has recently moved to a new location near Launceston at 47-49 McKenzie Street, Mowbray. Contact numbers are the same as before. As well as core specialities of Hydrographics, Marine Electronics, Land, Air and Sea Radio Communications sales and service, Marcom Watson has expanded into Automation, Control and Software Solutions.

Windiest power

Mawson's Hut Foundation members will take a wind turbine to Commonwealth Bay to help power their conservation work this season. As well, a cinematographer will accompany the team to assist in making a documentary about Mawson's 1914 expedition.

Imaginarium at risk

Council budget cuts and lack of funding from other sources is still threatening the operation of the Imaginarium in Devonport. Tasmania's only dedicated interactive science centre will close before the end of this year unless other councils or state government funding is provided. Dedicated staff and volunteers cater for 16,000 visitors attending the displays in the Imaginarium each year. An Imaginarium Supporters Evening

was held on September 2, 2009.

Smaller Tasmanian science education centres are in Hobart which has CSIROSEC, which runs demonstrations and workshops for schools and Hands-On Discovery Centre promotes renewable energy, while Launceston has Phenomena Factory with interactive displays from a NZ science centre.

Polar visitors

More than 25 teachers from Alaska and Tasmania met in Hobart in June to discuss learning outcomes from the Tasmanian Museum and Art Gallery's Ice E-Mystery Project, described in IB 45. Primary School classes from Tasmania, Queensland and Alaska were paired to produce 12 online books based on polar topics. The finished version is expected to be online soon.

Global warming symbol

Kenji Ogawa, world-renowned ice sculptor, is seeking funding to travel with a film crew to Antarctica this season to carve a sculpture symbolising the effects of global warming. Anyone interested in supporting this project is urged to contact Kenji on www.kenjisice.com

Extra transport

Amphibious vehicles previously used by

the Australian Army have been refurbished by the AAD for ship-to-shore transfers of cargo and personnel at sub-Antarctic islands. Originally built in the 1960s, AAD's upgrades will add another 12 years of use to the LARCs (Lighter, Amphibious, Resupply, Cargo), which can be used on land with wheels or on sea with a propeller, while the wheels steer the vehicle on both.



Photo: Frederique Olivier

Southern Rim intent

Plans are underway in Christchurch, New Zealand, for a meeting and signing of a Statement of Intent by Mayors of Antarctic Gateway cities. Coordinated by Shirley Johnson of Christchurch City Council, the meeting is planned for the end of September, 2009, to coincide with the official opening of the COMNAP Secretariat, previously hosted by Hobart, and the launch of the NZ 2009/2010 Antarctic season.

The signed Statement of Intent will ensure "a full exploration of potential exchanges in the areas of education, workforce development, tourism and economic development to promote common prosperity and city advancement" Expected participants are His Worship Mr Bob Parker, Mayor of Christchurch, NZ; Alderman Rob Valentine, Lord Mayor of Hobart, Tasmania, Australia; Her Worship Ms Helen Zille, Mayor of Cape Town, South Africa; Honorable Federico Sciurano, Intendente de Ushuaia, Argentina and Honorable Vladimiro Mimica Caracamo, Alcalde de Punta Arenas, Chile.



CONASTA

The Conference of the Australian Science Teachers Association

From 4-7 July, the annual Conference of the Australian Science Teachers' Association was held in Launceston, Tasmania. The TPN decided to take advantage of the presence of ~ 500 science teachers from around the nation. Chairman Bill Lawson approached the organising committee, and discussed a range of possible involvements, namely

- 1) TPN providing some sponsorship (in return for an opportunity to deliver a short plenary address)
- 2) TPN delivering a workshop session for teachers as part of the program
- 3) TPN taking a booth in the trade display area. The conference organisers were happy with these proposals, and further discussions established that the University of Tasmania, through IASOS, was best placed to provide the workshop and support the trade display. Bill Lawson himself was nominated to deliver the address to the teachers.

The next task was to plan the workshop for teachers – there were many of these sessions covering a host of topics, ranging from 'The exciting science of model rocketry' to 'Charles Darwin – discovering Australia and his science' and 'Using Cheese-making to convey the concepts of beneficial micro-organisms!'

IASOS designed a session titled Antarctic and Marine Science at UTAS, and aimed to showcase a number of dynamic PhD students who would speak about their areas of research. As well, Kelvin Michael would bookend the presentation and provide the attendees with some direct information about the SIPEX voyage (undertaken in September-October 2007) and the wonderful science teaching resources developed by Caroline Lapworth and Jane Dobson, two Tasmanian science teachers selected to participate in that voyage (you can look yourself at the voyage website: <http://www.sipex.aq/> and check under the education tab for

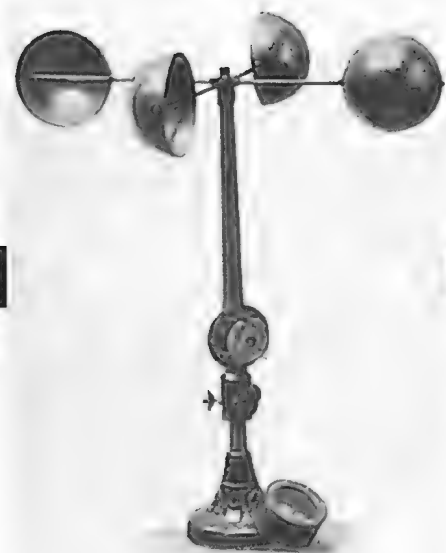
the curriculum materials).

Kelvin arrived in Launceston on the Saturday afternoon to set up displays in the trade booth. Apart from posters and (many) pamphlets describing the range of marine and Antarctic opportunities for study at UTAS, he was also armed with some sample issues of *Ice Breaker* and some flyers for the magazine. The booth was strategically located in the entryway to the area that was frequented by the teachers for their morning/afternoon teas and lunches, as well as drinks on that first evening. During the conference, Kelvin handed out lots of materials, spoke to many teachers from around the country, and felt that the investment of time had been worthwhile.

CONASTA kicked off properly on Sunday morning, with some heavy hitters taking to the podium – the first two speakers were Dr Jim Peacock (ex-Chief Scientist) and Bernie Hobbs of ABC New Inventors fame. Another highlight of the meeting was Dr Peter Binks (CEO of Nanotechnology Victoria) returning to his roots – Peter hails from northern Tasmania, and was Tasmania's Rhodes Scholar in 1983.

Bill was scheduled to address the teachers for 20 minutes, first thing in the morning of the second day of the conference. On the day, he quickly discovered that being first speaker is fine, except when the organisers want to steal some of your allocated time for "important" announcements about bus trips and dinners! However, Bill regrouped in inimitable style and delivered a punchy address under the title 'The Antarctic and Southern Oceans - An enticing learning field for Maths and Science', which promoted the potential for the use of Antarctic examples in modern teaching, and also recommended that teachers attend the workshop session later that afternoon.

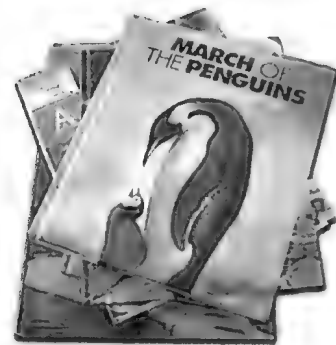
After some initial difficulties in finding students (the CONASTA dates over-



lapped with the Australian Marine Sciences Association conference in Adelaide, as well as a course at UTAS for the PhD students enrolled in the Quantitative Marine Sciences program) presentations were provided at the workshop by two excellent candidates, Alex Fraser and Jess Melbourne-Thomas (Rhodes Scholar for Tasmania in 2002). Alex had been a participant on SIPEX, and his studies of fast ice from satellite images contrasted nicely with Jess's account of mathematical modelling of coral reef processes in the Caribbean region. Both students spoke well and engagingly, and were great ambassadors for the University of Tasmania, and the Antarctic and marine sectors in a broader sense. Kelvin outlined direct opportunities for science teachers to consider enrolling in marine/Antarctic units offered at UTAS as part of the QMS PhD program or the Master of Antarctic Science program. The workshop was well-received, and generated a lot of questions and discussion, and hopefully some abiding interest in the topic areas.

In summary, the TPN sought to capitalise on the fact that Australia's science teachers were coming to Tasmania, and to send a message that the Antarctic and Southern Ocean regions are important regions rich in opportunity for science studies. In 2010, CONASTA will be convened in Sydney, and perhaps TPN should consider sending further representatives to continue this engagement?

Kelvin Michael
IASOS / TPN



Polar Publications

BOOK

White Demon: One Man's Quest for the South Pole

By Chris Weyers

Published by Pan Macmillan Australia

Price: \$34.99

A first-hand account of the author's trek to the Pole. Chris battles a crippling injury but does not tell his companions. He has to cope with fear and pain to reach his goal.

BOOK

The Ugly Truck and Dog Contest and Other Tales of Northern Life

By Cathy Jewison

Published by Borealis Press Ltd

Price: \$19.95

An interesting collection of short stories about the people, places and events around Yellowknife, Northwest Territories, Canada

BOOK

Tukiliit: The Stone People Who Live in the Wind

By Norman Hallendy

Published by Douglas & McIntyre

Price: \$16.75

Features stunning images of stone figures created by Inuits and other cultures around the world.

BOOK

Arctic Front, Defending Canada in the Far North

By Ken Coates, P. Whitney Lackenbauer, Greg Poelzer

Published by Thomas Allen Publishers

Price: \$18.87

Reveals Canadian governments' neglect of the North throughout history and outlines what needs to be done to protect the area.

FILM

Whiteout

A US Marshal investigates a series of brutal murders at Antarctic stations.

Due out in September 2009.
Trailer at <http://blog.newsarama.com/2009/07/23/whiteout-trailer-hits-the-web-2/>

BOOK

Captain Robinson: The Reminiscences of Tasmanian Master Mariner James William Robinson, 1824-1906.

Edited by Michael Nash.

Published by Blubber Head Press.

Price: \$55.00

Describes the Captain's seafaring life aboard whaling ships from the age of 11, including early methods used to catch whales and tough conditions for the whalers.

PLAY

The Antarctic Chronicles

Produced by Sister Fantastic Productions

Written by Jessica Manuel and directed by Paul Linke

Explores Jessica's personal experiences, through family and friends, while she lives and works as a fuel operator.

FILM

Whale Wars

A film about the anti-whaling vessel Steve Irwin chasing Japanese whalers across the Southern Ocean, has been nominated for an Emmy Award. Two Tasmanian cinematographers were among the 5 people involved in making the film for Animal Planet. The award winners will be announced in September 2009.

BOOK

The Nature of Ice

By Robyn Mundy

Published by Allen & Unwin

Price: \$26.99

A novel about the lives of two recent expeditioners in Antarctica, interwoven with photos and accounts of Mawson and his team in 1911-13. The author spent time at Davis and Mawson Stations, studying skuas and penguins.



Convergence in transit

After months of construction in a large shed at Electrona, the yacht Convergence saw daylight for the first time last month! The 53 foot science yacht was placed onto a large trailer towed by a powerful tractor and driven down to the boat ramp. Unfortunately high winds during the first day did not allow the launch to proceed, but this enabled Scott Laughlin and team to do further final checks before putting the boat in the water on the following day.

The tanks and keel were filled with about 3.5 tons of water ballast to ensure good stability. The mast was laid horizontally and secured on the top of the craft for transport. By morning the winds dropped and Convergence was launched and then towed up

the Derwent River to the Cleanlift Marine Complex in Goodwood, where she was placed on a drystand. This enabled Scott to continue the fit out in close proximity to engineering businesses needed to complete the next stages of building. After sanding and surface preparations, the shaft and engine installation and windows were the highest priorities, along with the rudder. Then the mast, chain plates and rigging were added.

Originally, it was planned to ship the yacht to Thailand for completion, but in late August, this was changed and Convergence is currently on route to the Philippines, where the fit out will be completed in an Australian-run yard.



Text and Photos: Frederique Olivier



Polar Calendar

| | | |
|---------|---------------------------------|---|
| 2 | September 2009 | Imaginarium Supporters Evenng. Dévonport, Tasmania |
| 7-11 | September 2009 | 1st Antarctic Climate Evolution Symposium. Granada, Spain. Details: cescutia@ugr.es |
| 16-18 | September 2009 | Workshop on Ocean Biology Observations. Mestre, Venice, Italy. |
| 17 | September 2009 | Marine Discovery Centre Open Day. 1.00-3.00pm Jetty Road, Woodbridge, Tasmania |
| 24 | September 2009 | Official Opening of COMNAP Secretariat in Christchurch, NZ |
| 25 | September 2009 | Official Signing of Statement of Intent between the Southern Rim Gateway cities to the Antarctic. Christchurch, NZ. (to be confirmed) |
| 28-30 | September 2009 | International Polar Year Film Festival. Library and Archives Canada. Submissions being accepted. Contact Scott Birdwise, Canadian Film Institute - birdwise@cfi-icf.ca |
| 30 2 | September 2009- October 2009 | International Society of Aero-medical Services and Flight Nurses Conference. Hobart Tasmania. For further details - www.isas.org.au |
| 1 | October 2009 | Free lecture. Envisioning the Sublime: New Representations of the Antarctic in the Information Age. Presented by Dr Peter Morse. 6pm, Stanley Burbury Theatre, UTAS |
| 9 | October 2009 | TPN meeting and AGM. Venue to be confirmed |
| 26 6 | October 2009- November 2009 | CCAMLR meetings. Hobart, Tasmania |
| 12 | November 2009 | Free lecture. The Intriguing History of Antarctic Civilization, Presented by Prof. Tom Griffiths. 6pm, Stanley Burbury Theatre, UTAS. Details: Lyn.Richards@utas.edu.au |
| 30 3 | November 2009- December 2009 | Antarctic Treaty Summit: Science-Policy Interactions in International Governance. Smithsonian Museum, Washington DC, USA. Taking place during the 50th Anniversary of the initial signatures to the Treaty (1 December 1959). For details, contact Paul Berkman: berkman@bren.ucsb.edu |
| 4-8 | December 2009 | IPY Early Career Research Symposium. Victoria, British Columbia, Canada. Organised by the Association of Polar Early career Scientists, this aims to bring Arctic and Antarctic career researchers from across the world, to collaborate and build networks to strengthen future polar research. Details: http://apecs.arcticportal.org |
| 9-11 | December 2009 | Antarctic Treaty Meeting of Experts on Ship-borne Tourism. Wellington, NZ. Details: atme@tcc.co.nz |
| ? | January 2010 | Advanced Biology Training Course in Antarctica. McMurdo Station, Antarctica. See course website for more information |
| 22-26 | February 2010 | Ocean Sciences Meeting. Portland, Oregon |
| 30 3 | August 2010- September 2010 | International Penguin Conference. Boston Massachusetts, USA. Contact ipcboxton@neaq.org |

Further details available at www.scar.org/events/



Helicopter Resources PTY.LTD.

With over twenty years of Antarctic Experience, Helicopter Resources has forged an enviable record in the service and support of Antarctic Operations.

Helicopter Resources is committed to safety, reliability and customer satisfaction.

Helicopter Resources - experts in the field of Antarctic Helicopter Support.

Phone: 03 6248 5130

Fax: 03 6248 5342

PO Box 321 Rosny Tasmania 7018

Email: helires@helicopterres.com.au

www.helicopterres.com.au

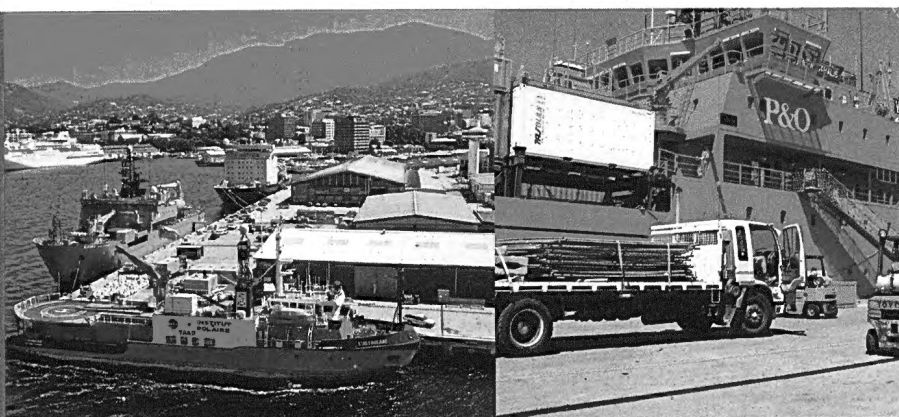
VEOLIA
ENVIRONMENTAL SERVICES

**Improving the
Living Environment!**

**Veolia specialises
in managing
Antarctic
waste**

1300 13 42 42

Accredited to Quality ISO9001, Safety AS4801 & Environment ISO14001



The Tasmanian Ports Corporation, through the Port of Hobart, plays a vital role in fostering the endeavours of the world's Southern Ocean and Antarctic operators.

The port is a conveniently located, well-served, cost-effective and strategically important base for Antarctic, sub-Antarctic and Southern Ocean programs.

It provides important services for both international and regional vessel operators and crew to access fuel, provisions, stevedoring, maintenance, accommodation and recreational services.

Tasports, a member of the Tasmanian Polar Network, welcomes all enquiries regarding its services for Antarctic and Southern Ocean activities.

Tasmanian Ports Corporation Pty Ltd

48 Formby Road, Devonport

Telephone +61 3 6421 4911

Facsimile +61 3 6421 4988

www.tasports.com.au

Tasmania's
TRADE LINK with the
WORLD



Wallhead Multimedia
www.wallheadmultimedia.com

Web Design, Development & Consultancy

Our message is clear:

We offer affordable web design.

Is your message as clear as this? If not then phone
Peter from Wallhead Multimedia on 0427 802 290.



Shipping & Air Calendar

Shipping

| | | | | | |
|---------|---------------------|---------------|------------------|-------|--|
| 14 | October | 2009 | Aurora Australis | Trial | Departs Hobart for Macquarie Island |
| 15-18 | October | 2009 | Aurora Australis | T | Maine Science |
| 21 | October | 2009 | L'Astrolabe | | Departs for Macquarie Island |
| 21-25 | October | 2009 | Aurora Australis | T | Macquarie Island |
| 28-30 | October | 2009 | Aurora Australis | V1 | Arrives Hobart, departs for Marine Science |
| 31 3 | October November | 2009- 2009 | L'Astrolabe | | Dumont D'Urville |
| 10-11 | November | 2009 | Aurora Australis | V1 | Marine Science |
| 12-20 | November | 2009 | Aurora Australis | V1 | Davis Station |
| 17 | November | 2009 | L'Astrolabe | | Arrives Hobart |
| 1 | December | 2009 | Orion | T3 | Departs Hobart for Macquarie Island |
| 2-4 | December | 2009 | Aurora Australis | V1 | Arrives Hobart, departs for Marine Science |
| 3 | December | 2009 | L'Astrolabe | | Departs Hobart |
| 5 | December | 2009 | Orion | T3 | Macquarie Island |
| 6-15 | December | 2009 | Aurora Australis | V2 | Marine Science |
| 10-16 | December | 2009 | L'Astrolabe | | Dumont D'Urville |
| 14 | December | 2009 | Orion | T3 | Bluff, NZ |
| 16-24 | December | 2009 | Aurora Australis | V2 | Casey Station |
| 22-24 | December | 2009 | L'Astrolabe | | Arrives Hobart, departs for Dumont D'Urville |
| 27 6 | December January | 2009- 2010 | Aurora Australis | V2 | Marine Science |
| 30 3 | December January | 2009- 2010 | L'Astrolabe | | Dumont D'Urville, departs for Marine Science |
| 9-12 | January | 2010 | Aurora Australis | V2 | Davis Station |
| 21-22 | January | 2010 | L'Astrolabe | | Dumont D'Urville |
| 24-26 | January | 2010 | Aurora Australis | V2 | Arrives Hobart, departs for Davis Station |
| 28-30 | January | 2010 | L'Astrolabe | | Arrives Hobart |

Flights

| | | | | |
|----|----------|------|-------------|-------------------------------|
| 25 | October | 2009 | C-212 | Hobart to Casey - positioning |
| 26 | October | 2009 | Airbus A319 | Hobart to McMurdo and return |
| 1 | December | 2009 | Airbus A319 | Hobart to Casey and return |
| 8 | December | 2009 | Airbus A319 | Hobart to Casey and return |
| 15 | December | 2009 | Airbus A319 | Hobart to Casey and return |
| 21 | December | 2009 | Airbus A319 | Hobart to Casey and return |
| 5 | January | 2010 | Airbus A319 | Hobart to Casey and return |
| 12 | January | 2010 | Airbus A319 | Hobart to Casey and return |
| 19 | January | 2010 | Airbus A319 | Hobart to Casey and return |
| 27 | January | 2010 | Airbus A319 | Hobart to Casey and return |

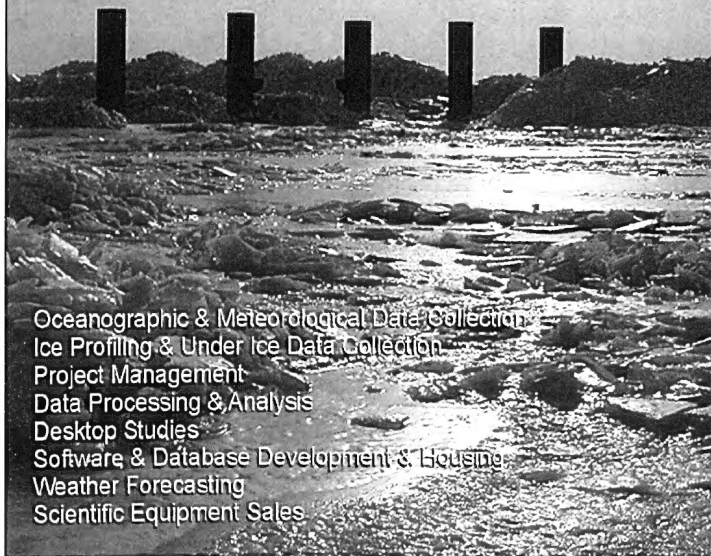


Metocean Services International

Providers of Meteorological and Oceanographic Services

In

Any Environment



Oceanographic & Meteorological Data Collection
Ice Profiling & Under Ice Data Collection
Project Management
Data Processing & Analysis
Desktop Studies
Software & Database Development & Hosting
Weather Forecasting
Scientific Equipment Sales

Metocean Services International
16 Gregory St, Sandy Bay
Tasmania 7005, Australia
Tel. +61 3 62240788

Metocean Services International
1 Gabriel Place, Gabriel Road
Cape Town 7800 South Africa
Tel. +27 21 7975554

www.metoceanservices.com

FOR ALL YOUR DESIGN AND PRINT NEEDS

Noble ink
design and print

**DIGITAL PRINTING
COPYING • GRAPHIC DESIGN
ILLUSTRATION • LAMINATING
BINDING • SCANNING**

Booklets Brochures Newsletters
Business Cards Flyers Posters
Calenders Logo Design

(03) 6285 2480

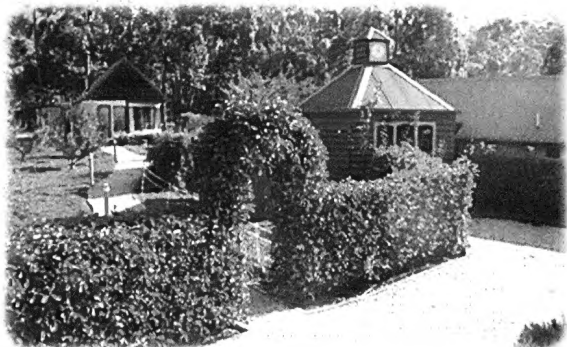
Kingston

48 Channel Hwy 7050

Email: paul@nobleink.com.au Fax: 6229 2407



Heron's Rise Vineyard Cottages



*Wake up to home made bread and real
coffee in our peaceful self-contained
cottages.*

*All three have beautiful rural and
water views. Catch the last rays of the
sun before enjoying a glass of our wine
and perhaps dinner cooked by the
owners.*

*At Kettering,
gateway to Bruny Island, 20mins from
Kingston, 30 mins from Hobart.*

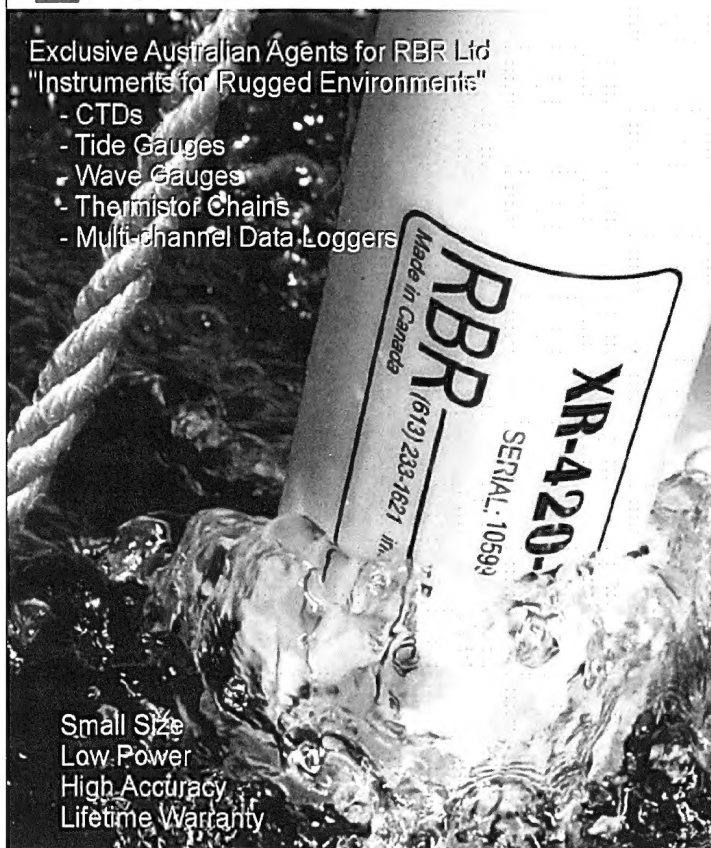
100 Saddle Road, PO Box 271
Kettering Tasmania 7155
Phone (03) 62674339
Email cwhite@vision.net.au
www.heronrise.com.au



Metocean Services International

Exclusive Australian Agents for RBR Ltd
"Instruments for Rugged Environments"

- CTDs
- Tide Gauges
- Wave Gauges
- Thermistor Chains
- Multi-channel Data Loggers



Small Size
Low Power
High Accuracy
Lifetime Warranty

Metocean Services International
16 Gregory St, Sandy Bay
Tasmania 7005, Australia
Tel. +61 3 62240788

stefan@metoceanservices.com
www.metoceanservices.com

Also in South Africa

